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(FILE 'HOME' ENTERED AT 12:17:37 ON 22 SEP 2000)

FILE 'REGISTRY' ENTERED AT 12:17:41 ON 22 SEP 2000

E CITRIC ACID/CN  
L1 5 S E3,E10,E21,E27,E32  
E 8-HYDROXYQUINOLINE/CN  
L2 1 S E3  
L3 2 S E14-15  
SEL NAME L1  
SEL NAME L2  
SEL NAME L3

FILE 'CA' ENTERED AT 12:22:51 ON 22 SEP 2000

L4 47648 S L1 OR E1-11  
L5 11515 S L2 OR E12-27  
L6 58 S L3 OR E28-31  
L7 207 S L4 AND L5  
L8 1 S L6-7 AND TITRA?  
L9 12 S L6-7 AND (H3BO3 OR BORON OR BORIC OR BORATE)  
L10 13 S L8-9

=> d l10 bib,ab 1-13

**L10 ANSWER 1 OF 13 CA COPYRIGHT 2000 ACS**

AN 132:20747 CA

TI Surface regeneration of biosensors using a combination of  
solutions based on interaction-specific optimized processes

IN Andersson, Karl; Hamalainen, Markku; Malmqvist, Magnus; Roos,  
Hakan

PA Biacore AB, Swed.

SO PCT Int. Appl., 133 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9963333	A1	19991209	WO 1999-SE921	19990531
	W: AU, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU,				
MC, NL,	PT, SE				

	AU 9946658	A1	19991220	AU 1999-46658	19990531
PRAI	US 1998-87402		19980529		
	WO 1999-SE921		19990531		

AB Surface regeneration of affinity biosensors and characterization  
of biomols. assocd. therewith by multivariate technique employing  
cocktails of regeneration agents to optimize regeneration of biosensor  
surface and/or characterize biomols. assocd. therewith. Kits and stock  
solns. For use in the context of this invention, as well as assocd.  
Computer algorithms are also disclosed. Stock solns. of regeneration  
cocktails are prepd. and combined. Solns. are acidic, basic, ionic,  
org., detergent and chelating agent contg. Biosensors for various

affinity bindings are regenerated by the method; the affinity reactions are used for optimizing the regeneration process. Immuno-reactions, nucleic acid hybridization, avidin/streptavidin-biotin, hormone-hormone receptor interactions are performed with Biocore instruments and CM5 sensor chips.

RE.CNT 5

RE

(1) Andersson, K; Anal Chem 1999, V71(13), P2475 CA

(2) Behringwerke AG; EP 0781999 A 1997

(3) Loefaas, S; WO 9826288 A 1998

(4) Marconi Gec Ltd; GB 2270976 A 1994

(5) Yagishita, A; JP 63229359 A 1988

**L10 ANSWER 2 OF 13 CA COPYRIGHT 2000 ACS**

AN 129:177239 CA

TI Compositions and methods for removal of chemical residues from metal or dielectric surfaces or chemical mechanical polishing of copper surfaces

IN Small, Robert J.

PA EKC Technology, Inc., USA

SO PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9836045	A1	19980820	WO 1998-US2794	19980214
	W: CN, ID, JP, KR, SG				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5981454	A	19991109	US 1997-801911	19970214
	EP 909311	A1	19990421	EP 1998-906398	19980214
	R: AT, BE, CH, DE, DK, FR, GB, IT, LI, LU, IE, FI				
PRAI	US 1997-801911		19970214		
	US 1993-78657		19930621		
	US 1995-443265		19950517		
	US 1997-826257		19970327		
	WO 1998-US2794		19980214		

OS MARPAT 129:177239

AB The title compns. comprise an aq. soln. with pH 3.5-7 and contg. A monofunctional, difunctional or trifunctional org. acid and a buffering amt. of a quaternary amine, ammonium hydroxide, hydroxylamine, hydroxylamine salt, hydrazine or hydrazine salt base. A compn. for final concn. 13% and pH 7 comprised diglycolamine 55, gallic acid 10, hydroxylamine 30, and water 5%.

**L10 ANSWER 3 OF 13 CA COPYRIGHT 2000 ACS**

AN 129:50838 CA

TI Aqueous compositions containing \*\*\*8\*\*\* -  
\*\*\*hydroxyquinoline\*\*\* zinc for wood preservation

IN Soeda, Masahito; Ota, Michitaka

PA Nippon Steel Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10139606	A2	19980526	JP 1996-296430	19961108
AB	Title compns., which show antiseptic, antifouling, and antimicrobial effect, contain 0.4-20 wt.% water-sol. acids and 0.2-10 wt.% ***8*** - ***hydroxyquinoline*** Zn (I) at mol ratio of 1-20. An aq. soln. contg. 1 wt.% I and 1.3% maleic acid was applied to wood to show no wood wt. Loss after 8 mo. Corrosion of nail soaked into the solns. was inhibited by addn. of Hibiron KE 150 (anticorrosive).				

**L10 ANSWER 4 OF 13 CA COPYRIGHT 2000 ACS**

AN 124:248686 CA  
TI Hydroxyquinoline compound with dicitratoboric acid  
AU Sergeeva, G. S.; Cherepanova, T. A.; Luttseva, M. A.; Burnashova, N. N.  
CS Chitin. Politekh. Inst., Chita, Russia  
SO Izv. Vyssh. Uchebn. Zaved., Khim. Khim. Tekhnol. (1995), 38(3), 32-5  
CODEN: IVUKAR; ISSN: 0579-2991  
DT Journal  
LA Russian  
AB The reaction of \*\*\*H3BO3\*\*\* with \*\*\*citric\*\*\* \*\*\*acid\*\*\* (H2cit) and \*\*\*8\*\*\* - \*\*\*hydroxyquinoline\*\*\* (L) in aq. soln. Gave HL[B(cit)2].2H2O. The complex was characterized by IR spectra and thermal anal. and its antimicrobial activity was detd.

**L10 ANSWER 5 OF 13 CA COPYRIGHT 2000 ACS**

AN 117:33535 CA  
TI Zinc monoglycerolate. A slow-release source of therapeutic zinc: solubilization by endogenous ligands  
AU Fairlie, D. P.; Whitehouse, M. W.; Taylor, R. M.  
CS Dep. Pathol., Univ. Adelaide, Adelaide, 5001, Australia  
SO Agents Actions (1992), 36(1-2), 152-8  
CODEN: AGACBH; ISSN: 0065-4299  
DT Journal  
LA English  
AB A combination of 65Zn-tracer detns., oxidative analyses for glycerol, and a bioassay for uncomplexed Zn2+ have shown that: (i) zinc monoglycerolate (ZMG) dissolves in aq. salt solns./physiol. media by dissocn. into zinc ions and glycerol, but the rate and extent of ZMG dissoln. depend upon pH, and/or concn. and complexing efficiency of zinc-ligands; (ii) under physiol. conditions certain ligands present in skin and blood (e.g. citrate, lactate, albumin, histidine, glutathione and other thiols and, to a lesser extent, amino acids) accelerate ZMG dissoln.; and (iii) there is a general correlation between the conditional stability consts. (pH 7.3, 25.degree.) of zinc-ligand complexes and the ability of given ligands to (a) solubilize ZMG in vitro and (b) mask the irritancy of Zn2+ in vivo. These observations indicate a mechanism for the transformation of ZMG applied transdermally or s.c., to bioactive zinc (anti-arthritic nutritional supplement, etc.).

**L10 ANSWER 6 OF 13 CA COPYRIGHT 2000 ACS**

AN 110:150929 CA  
TI Method and anhydrous concentrate for preparing aqueous solutions containing chromogenic materials and peroxides

IN Ben-Michael, Abraham  
 PA Savyon Diagnostics Ltd., Israel  
 SO Eur. Pat. Appl., 8 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 271713	A2	19880622	EP 1987-116654	19871111
	EP 271713	A3	19890712		
	R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
	NO 8704540	A	19880616	NO 1987-4540	19871102
	JP 63199270	A2	19880817	JP 1987-284425	19871112
	FI 8705051	A	19880616	FI 1987-5051	19871116
	DK 8706117	A	19880616	DK 1987-6117	19871120
PRAI	IL 1986-80964		19861215		

AB A substantially anhyd. concd. chromogen soln. is provided which is stable for considerable periods even in admixt. with a peroxide and can be used to prep. an aq. working soln., e.g. for diagnostic purposes, whose activity is comparable to that of a freshly prepd. working soln. 4-Chloro-1-naphthol (2000 mg) was dissolved in 200 mL DMSO and stirred for 2 h. H<sub>2</sub>O<sub>2</sub> (500 .mu.L) was then added and the mixt. was stirred for an addnl. 2 h. The resulting soln. was stable for .gtoreq.3 mo at 37.degree., 9 mo at 25.degree., and 24 mo at 4.degree.. A working soln. was prepd. by addn. of 4 vols. of distd. water.

**L10 ANSWER 7 OF 13 CA COPYRIGHT 2000 ACS**

AN 110:100138 CA  
 TI Electroless bath for ternary nickel-phosphorus alloys  
 IN Degen, Horst; Scharwaechter, Klaus  
 PA Collardin, Gerhard, G.m.b.H., Fed. Rep. Ger.  
 SO Eur. Pat. Appl., 16 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA German  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 289838	A2	19881109	EP 1988-106083	19880416
	EP 289838	A3	19891108		
	R: AT, BE, DE, FR, GB, IT, SE				
	DE 3713734	A1	19881117	DE 1987-3713734	19870424
	JP 63286582	A2	19881124	JP 1988-103752	19880425
PRAI	DE 1987-3713734		19870424		
OS	MARPAT 110:100138				

AB The ternary alloys are deposited at 75-95.degree. in 30-240 min from aq. solns. contg. Ni ions and NaH<sub>2</sub>PO<sub>2</sub> or other reducing agent as well as org. complex formers, stabilizers, accelerators, wetting agents, and brighteners. The Ni-W-P alloys are deposited from aq. solns. (pH 4.5-9.5) contg. Ni<sup>2+</sup> 2.0-6.0, WO<sub>4</sub><sup>2-</sup> 6.5-17.5, NaH<sub>2</sub>PO<sub>2</sub> 15-40, and optionally \*\*\*H<sub>3</sub>BO<sub>3</sub>\*\*\* 30-60, (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> 60-65, or NH<sub>4</sub>Cl 40-60 g/L with Ni<sup>2+</sup>:WO<sub>4</sub><sup>2-</sup> mol ratio 1:(1.5-3.25). The Ni-Co-P alloys are deposited from similar aq. solns. contg. Ni<sup>2+</sup> 2.5-8.0, Co<sup>2+</sup> 2.5-8.0 g/L instead of WO<sub>4</sub><sup>2-</sup>, NaH<sub>2</sub>PO<sub>2</sub>, and optional components with Ni<sup>2+</sup>:Co<sup>2+</sup> mol ratio 1:(0.5-2). All solns. and/or its alkali metal salts, and optionally a sulfonic acid RSO<sub>3</sub>H and/or its alkali metal salts, where

R is H, OH, Cl, Me, CO<sub>2</sub>H, and C(OH)(CO<sub>2</sub>H)CH<sub>2</sub>CO<sub>2</sub>H; R<sub>1</sub> and R<sub>2</sub> are independently H, OH, and CH<sub>2</sub>CO<sub>2</sub>H; x is an integer .gtoreq.5; R<sub>3</sub> is H and CO<sub>2</sub>H; and R<sub>4</sub> is CH<sub>2</sub>CH, CH<sub>2</sub>CHCH<sub>2</sub>, and CH<sub>2</sub>C(Me)CH<sub>2</sub>. The alloy deposits on substrates are heat-treated in N at 250-400.degree. for 1-2.5 h. Thus, Ni-Co-P and Ni-W-P alloy coatings on steel were obtained from the baths contg. different org. acids.

**L10 ANSWER 8 OF 13 CA COPYRIGHT 2000 ACS**

AN 109:51285 CA

TI Fatty acids or hydroxycarboxylic acids in integral multilayered analysis

elements for calcium determination in body fluids

IN Tanaka, Mitsutoshi; Katsuyama, Shunkai

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63075563	A2	19880405	JP 1986-217938	19860918
AB	In an integral multilayered anal. element consisting of a transparent, non-water permeable support layer, a reagent layer contg. Ca-binding, optically detectable indicator and a porous spreading layer in that order for Ca detn., fatty acids or their salts or hydroxycarboxylic acids or their salts are incorporated into layers above the reagent layer to avoid interference by albumin and other proteins. A multilayered test element consisted of a transparent polyethylene terephthalate film, a reagent layer contg. deionized gelatin, nonylphenoxypolyethoxyethanol,***boric*** acid, o-cresol-phthalein complexion and ***8*** -***hydroxyquinoline*** -5-sulfonic acid, an adhesive layer contg. deionized gelatin, nonylphenoxypolyethoxyethanol and TiO <sub>2</sub> particles, a PET fabric layer, and a layer contg. Na polystyrene sulfonate, nonylphenoxypolyethoxyethanol, and Na oleate.				

**L10 ANSWER 9 OF 13 CA COPYRIGHT 2000 ACS**

AN 108:81823 CA

TI Bath preparations containing carboxylic acid and alkali metal salts

IN Takeshita, Kenjiro; Shiraishi, Naonori; Ito, Yasuo

PA Kankyo Tech K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 2 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 62195321	A2	19870828	JP 1986-38032	19860221
AB	A bath prepn. contains NaHCO <sub>3</sub> , Na <sub>2</sub> SO <sub>4</sub> , Al <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> in addn. to a carboxylic acid ( ***citric*** ***acid*** , tartaric acid, etc.) or ***oxin*** -5-sulfonic acid which prevents sedimentation of Al <sup>3+</sup> and alkali salt. A bath prepn. was prepd. consisting of NaHCO <sub>3</sub> 30-70, Na <sub>2</sub> SO <sub>4</sub> 5-15, K alum 5-40, succinic acid 1-5, tartaric acid 5-30, and ***H <sub>3</sub> BO <sub>3</sub> *** 1-3% by wt.				

**L10 ANSWER 10 OF 13 CA COPYRIGHT 2000 ACS**

AN 108:67929 CA

TI The effect of oxy acids and other compounds on atomic-absorption determination of magnesium in nonferrous alloys

AU Pilipyuk, Ya. S.; Ishchenko, V. B.; Soloshonok, V. V.;

Pyatnitskii, I. V.

CS Kiev. Gos. Univ., Kiev, USSR

SO Ukr. Khim. Zh. (Russ. Ed.) (1987), 53(8), 847-51

CODEN: UKZHAU; ISSN: 0041-6045

DT Journal

LA Russian

AB The interfering effects were studied of acids, elements, reagents, and acidity on at. absorption detn. of Mg in nonferrous alloys using propane-butane-air flames. It is recommended that the sample should be dissolved by HNO<sub>3</sub> (in the presence of .ltoreq.0.1% Sn, HNO<sub>3</sub> + HCl can be used). For samples contg. significant amts. of Cr, Sn, and Si, dissoln. by HNO<sub>3</sub> contg. \*\*\*boron\*\*\* fluoride is recommended. The successive detn. of Mg in the soln. should be done at const. acidity. As liberating agents, Sr or La nitrates should be used at 1 mg/mL. When the content of Al in the soln. was <0.01 mg/mL and the total salt content >0.5 g/50 mL, the suitable liberating agents included hydroxycarboxylic acids, Complexon III, and hydroxyquinoline. Mg should be detd. in alloys by using the std. addn. method since the effects of the matrix components are quite complex. The above recommendations were used for the detn. of Mg in brasses, bronzes, Zn-, Cu-, and Al-base alloys.

**L10 ANSWER 11 OF 13 CA COPYRIGHT 2000 ACS**

AN 106:98981 CA

TI Enzyme assays

IN Ben-Michael, Abraham

PA Savyon Diagnostics Ltd., Israel

SO Brit. UK Pat. Appl., 9 pp.

CODEN: BAXXDU

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	GB 2170600	A1	19860806	GB 1986-2197	19860129
	GB 2170600	B2	19890607		
	IL 74205	A1	19900118	IL 1985-74205	19850131
	DE 3601686	A1	19860821	DE 1986-3601686	19860117
	DE 3601686	C2	19930722		
	US 4849342	A	19890718	US 1986-823367	19860128
	FR 2576910	A1	19860808	FR 1986-1314	19860130
	FR 2576910	B1	19890728		
	JP 61181399	A2	19860814	JP 1986-19173	19860130
PRAI	IL 1985-74205		19850131		

AB Chem. compns. for stabilizing mixts. of chromogens and peroxides for enzyme assays contain I-V (R1, R2, R3, R4 = H, OH, lower alkyl, etc.; X = N, O, C, S; R5, R6, R7, R8 = H, lower alkenyl, NH<sub>2</sub>, (un)substituted Ph, etc; R9, R10 = OH, lower alkenyl; R11 = alkenyl; R12 = (un)substituted azulene; R13 = H, C<sub>6</sub>H<sub>4</sub>OH; Y, Z = O, N, S; R14, R15, R16, R17 = H, OH, lower alkyl). Reagent compns. contg. various ratios of water-miscible org. solvents to aq. buffers suitable for

intracellular and/or extracellular enzyme assays are presented. A reagent compn. for the detection of horseradish peroxidase in free soln. and in cell-bound form contains \*\*\*8\*\*\* - \*\*\*hydroxy-quinoline\*\*\* hemisulfate (stabilizer) 100, 4-chloro-1-naphthol (chromogen) 500, acetanilide 80, pyrophosphate 80, and nitrate 800 mg in 1 L of Tris buffer-DMSO mixt. where DMSO = 30-40% by vol.

**L10 ANSWER 12 OF 13 CA COPYRIGHT 2000 ACS**

AN 68:26557 CA

TI Determination of aluminum with \*\*\*8-hydroxy-quinoline\*\*\* .II. Precipitation in ammoniacal cyanide-EDTA solution

AU Claassen, A.; Bastings, L.; Visser, Jan

CS N. V. Philip's Gloeilampenfabrieken, Eindhoven, Neth.

SO Analyst (London) (1967), 92(1009), 618-21

CODEN: ANALAO

DT Journal

LA English

AB A general titrimetric method for detn. of 2-20 mg. of Al is described.\*\*\*Citric\*\*\* \*\*\*acid\*\*\*, NH<sub>4</sub>OH, KCN, and Na<sub>2</sub>SO<sub>3</sub> are added to the Al soln. followed by EDTA (di-Na salt) (I) and \*\*\*8\*\*\* - \*\*\*hydroxyquinoline\*\*\*. The ppt. is filtered, washed, dissolved in HCl, and \*\*\*titrated\*\*\* with KBr. With .ltoreq.0.1, 0.1-0.25, 0.25-0.5, or 0.5-1.0 g. Al, KCN 3, 3, 5, and 10 g. and 1, 2.5, 5, and 10 g. Na<sub>2</sub>SO<sub>3</sub>, resp., must be used to complex Al. The amt. of I (a min. be 10 times the wt. of Cd, Mn, Pb, Zn, and the rare earths plus 20 times the wt. of alk. earths and Mg present. For borosilicate glass (National Bureau of Standards 93), 1.02% Al is found for a certified value of 1.03%. Be, Bi, Ga, Hf, In, Nb, Sb (III), Sc, Th, U, V, Sr, and >1 mg. F- interfere. Interference by Cr and Ti can be prevented by procedure modifications.

**L10 ANSWER 13 OF 13 CA COPYRIGHT 2000 ACS**

AN 66:44330 CA

TI Preservative medium for cut flowers

IN Biggs, Percival R.

SO U.S., 3 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	US 3287104		19661122	US	19631029
AB	Title compns. contain 1000 to 2000 parts of sucrose, 10 to 20 parts of K <sub>2</sub> SO <sub>4</sub> , 5 to 50 parts of KH <sub>2</sub> PO <sub>4</sub> , traces of ***H <sub>3</sub> BO <sub>3</sub> ***, 4 to 17 parts of Na benzoate, 4 to 20 parts of Na <sub>2</sub> S <sub>2</sub> O <sub>5</sub> , 4 to 20 parts of ***citric*** ***acid***, and 4 to 17 parts of ***8*** - ***hydroxyquinoline*** K sulfate. For example, 20 parts of such a concentrate was added to 570 parts of H <sub>2</sub> O. These components serve as a nutrient, as a source of K <sup>+</sup> , SO <sub>4</sub> <sup>2-</sup> , and PO <sub>4</sub> <sup>3-</sup> , for controlling the pH, as a source of B, as a fermentation and mold inhibitor, and for keeping the soln. clear. Such solns. are from 1.2 to 30 times as effective as plain H <sub>2</sub> O, depending on the kind of cut flowers. Twenty-four well known flowers were used in the evaluation. An example of a useful compn. is as follows; 206 parts of sucrose, 2 parts of K <sub>2</sub> SO <sub>4</sub> , 3 parts of KH <sub>2</sub> PO <sub>4</sub> , 1.25 parts of Na benzoate, 1.5 parts of ***citric***				

\*\*\*acid\*\*\* , 0.01 part of \*\*\*H3BO3\*\*\*, 1.75 parts of Na2S2O5, and  
1.6 parts of \*\*\*8\*\*\* -\*\*\*hydroxyquinoline\*\*\* K sulfate.

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